

AMENDMENTS TO THE SPECIFICATION

On page 1, after the title, insert the following paragraph:

--CROSS REFERENCE TO RELATED APPLICATIONS

The present application is a continuation of U.S. application no. 10/422,849, filed on April 25, 2003, which is a continuation of U.S. application no. 09/939,655, filed on August 28, 2001 (now U.S. Patent No. 6,577,525, issued on June 10, 2003), the disclosures of which are each herewith incorporated by reference in their entirety.--

Please rewrite paragraph [0010] beginning on page 5, as follows:

[0010] The reference voltage generating circuit 115 includes a first 202 and second ~~204~~ 244 regulating circuit each associated with a respective reference resistance element 108, 110. These regulating circuits respectively hold the voltage across reference resistors elements 108 and 110 at V_A in the manner described above with reference to FIG. 2. The resistance elements R_0 , R_1 have respective known resistance values corresponding to one of the logic states of a memory element and the other corresponding to the other possible logic state. The reference voltage generating circuit 115 also includes capacitors C_1 and C_0 respectively associated with the reference resistance elements R_0 and R_1 . Each of the capacitors C_1 and C_0 has one lower terminal grounded and the other upper terminal connectable to a common voltage line 132 through a respective switch element 134, 136. The switch elements 134, 136 are configured to connect the upper terminals of the capacitors C_1 , C_0 to either a source of voltage V_A or to the common voltage line 132. The common voltage line 132 is connected to the reference voltage input 113 of comparator 304.

Please rewrite paragraph [0011] as follows:

[0011] As noted, the comparator 304 also has a voltage input 116. This is connected through another switch element 206 to an upper terminal of a sensing capacitor C_{sense} , the lower terminal of which is grounded. Switch element 206 is adapted to connect the upper terminal of comparator C_{sense} to either a source of voltage V_A or to the input 116 of comparator 304. The input 116 is also connected to the upper (drain) terminal of transistor 240 which has ~~it's~~its source terminal connected to the resistance element 204, the resistance of which is to be measured.